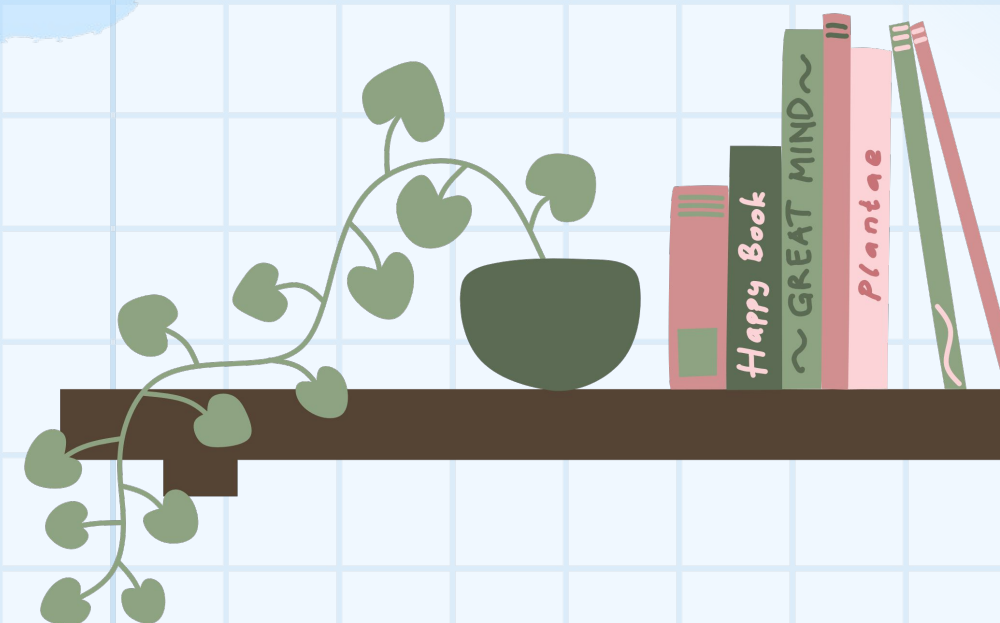
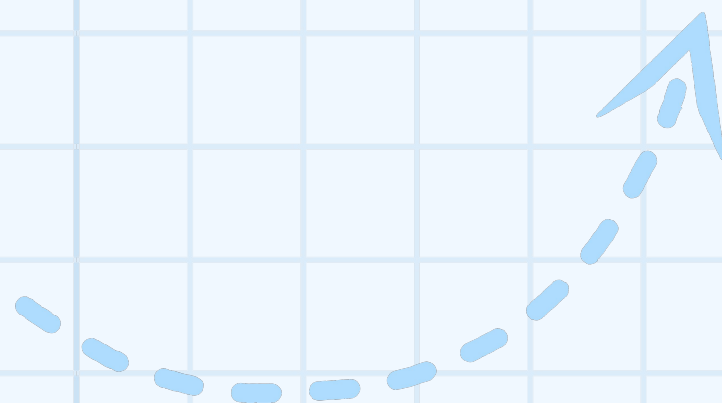
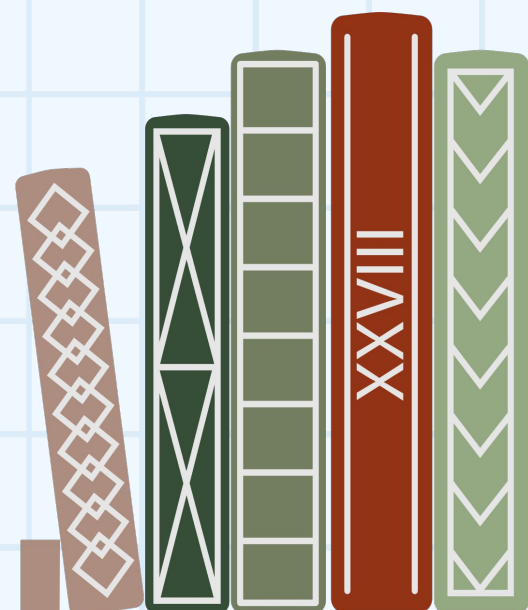




# BS./BSC.IN

Applied ai and Data Science

## Basics of Data Analytics



# Let's dive into and learn:



1

Different Types of Data Analytics

2

Exploratory Analytics

3

Descriptive Analytics

4

Diagnostic Analytics

5

Predictive Analytics

6

Prescriptive Analytics

# Data Analytics



Powered by



**FutureSense**

Data Analytics is the systematic approach to

- Gathering, cleaning, organizing and analysing data
- Interpreting the results of the analysis
- Uncovering insights from the data
- Reporting your findings



# Types of Data Analytics

## Exploratory Analytics

- First step of the analysis no matter what type the data is
- Gathering and sorting the data and reviewing it
- E.g. bringing all the dates into a common format
- Understanding and identifying the type and format of the data
- Cleaning it to make sure it is usable
- Helps form hypothesis for further analysis





# Types of Data Analytics

## Descriptive Analytics

- Seeks to answer the question “What happened?”
- Summarizes past data
- Uncovers patterns and trends hidden in historical data
- Uses simple statistical concepts
- E.g. a grocery store owner wants to know the value of the largest bill generated by a customer on a given day
- Create simple visualizations e.g. scatter plot



# Types of Data Analytics

## Diagnostic Analytics

- Seeks to answer the question “Why did it happen?”
- Takes insights from descriptive analysis to dig deeper
- Uncovers the cause of the outcome
- E.g. a retail owner wants to know why sales were low on Mondays
- Sometimes uses more sophisticated statistical or mathematical models



# Types of Data Analytics

## Predictive Analytics

- Seeks to answer the question “What could happen next?”
- Predict future events or outcomes based on historical data
- Uses advanced statistical and mathematical tools - Machine Learning, Deep Learning, Artificial Intelligence
- Used in finance, weather forecasting and more
- E.g. a retail owner wants to know whether a customer is likely to buy their product



# Types of Data Analytics

## Prescriptive Analytics

- Seeks to answer the question “What should be done about it?”
- Assess what you should do and the likely outcomes you would face
- Uses advanced statistical and mathematical tools
- E.g. a retail owner wants to decide which type of ad campaign to run



# Recap



## Different Types of Data Analytics and their purpose



# Thank you

